UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,188	02/07/2007	Yukiko Ohira	159-100	7241
23117 7590 12/07/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR			EXAMINER	
			FORTUNA, JOSE A	
ARLINGTON, VA 22203			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			12/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/576,188	OHIRA ET AL.		
Office Action Summary	Examiner	Art Unit		
	José A. Fortuna	1791		
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D/ - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI	l. lely filed the mailing date of this communication. (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on <u>07 Fe</u> This action is FINAL . 2b) ☑ This Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 1-5 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-5 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o Application Papers 9) ☐ The specification is objected to by the Examine	r election requirement.			
10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te		

Application/Control Number: 10/576,188 Page 2

Art Unit: 1791

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al., JP 09-031891, (JP Machine translation used), or Takebayashi et al., JP 10-018197, (JP Machine translation used), in view of Nisogi et al., WO 02/0100 (equivalent EP 0300512 A1 used as the

Art Unit: 1791

translation) or Makihara et al., JP 2003-171893, (JP Machine translation used), or Okago et al., JP 2000-345493, (JP Machine translation used).

Both Okada et al. and Takebayashi et al. teach a cast coated paper and process of making, in which a paper substrate is formed, by the wet process, and then a coated with a coating layer comprising an inorganic pigment, e.g., Kaolin, and a plastic pigment, see abstract and ¶s-[0012]-[0016] of the detailed description section of Okada et al. and abstract and ¶s-[0018]-[0021] of Takebayashi et al. They teach loading ranges of the Kaolin pigment in the same range as claimed, see abstract and ¶-[0018] of Takebayashi et al. and abstract and ¶-[0014] of Okada et al. They also teach that the cast coating is done by subjecting a wet coating layer into a pressure contact with the surface of a heated mirror surface drum to form a finished cast coating layer, see abstracts. Takebayashi et al. teach a size distribution of the Kaolin that seems to fall within the claimed ratio. However, the secondary references, Nisogi et al., Makihara et al., and Okago et al., teach that using a size distribution of the Kaolin pigments as claimed have superior print gloss and excellent surface feel, while improving the coatability of the base paper, see ¶s-[0025]-[0027] of Nisogi et al. (The EP'512); improves the disposition of blister, see the Detailed Description of Makihara et al.; printing glossiness and reduced weight, see abstract of Okago et al. The secondary references teach also the use of bond inhibiting agent to increase the bulk of the base paper and, superior pliability as well as greater resistance to tearing, see for example ¶-[0014] of Nisogi et al. Therefore, using the Kaolin size distribution and the use of bond inhibiting agent in the paper substrate as suggested by the secondary references in the paper s of Okada et al. or Takebayashi et al. would have

Application/Control Number: 10/576,188

Art Unit: 1791

been obvious to one of ordinary skill in the art in order to obtain the advantages discussed above, i.e., better printability, bulkier paper, superior Gloss, etc.

Page 4

5. Claims 1-5 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nisogi et al., WO 03/056101 A1, (Equivalent US Patent Application Publication No. 2005/0016701 A1, has been used as the translation).

Nisogi et al. teach a coated printing paper and method of making it, in which a coating mixture of an organic plastic particles and inorganic pigments, e.g. Kaolin, is added to the surface of paper substrate, said paper substrate having a bond inhibiting agent, see abstract and ¶s-[0024], [0043]-[0046]. In ¶-[0044] Nisogi et al. teach that it is preferred to use Kaolin with size distribution and amounts as claimed and in ¶-[0043] they teach that pigment can include plastic pigments that can be used alone or in combination of two or more as necessary. In ¶-[0049] Nisogi et al. teach that the coating can be applied using any known coater, which includes cast coating, since this technique is very well known in the art. It seems that Nisogi et al. teach all the limitations of the claims or at least the minor modifications to obtain the claimed invention, e.g., the use cast coating technique, would have been obvious to one of ordinary skill in the art in view of the teachings on ¶-[0049].

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of Cast Coating.

Art Unit: 1791

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/José A Fortuna/ Primary Examiner Art Unit 1791

JAF